The *architectonics* of virtual spaces
Architecture and urbanism in video games and virtual reality

Round table, Stiftung Bibliothek Werner Oechslin, Einsiedeln, Switzerland
9.6.2018, 9-17:30

Space – in particular architectural and urban space – is always both real and virtual. For human beings, space is a construct of its perception *via* the body, but it is also culturally and socially determined as "relational space." Architectural and urban spaces are inherently shaped by human beings: by their senses, by their perception, and by their cultural and social bonds. We experience these spaces as "real" and contingent, despite all possible false perceptions that might deceive us. They are an extension of our body – as well as related to the neurological, embodied mind – and are tied to its limitations.
While traditional forms of virtuality such as movies and literature can only partially overcome these ties and boundaries – bound as they are to sight, sound, or our sense of fantasy – new digital tools and forms of immersive virtuality can reveal new orders of experience, allowing an interaction with this space. This interaction even partially allows one to design this space. At least one is either asked to perform tasks – play – or can replicate reality via simulation.

At the latest at this point, one must question the nature of the relationship between "virtual reality" and "reality," in particular regarding the experience and the design of space, and thus in relation to architecture. Is the designed virtual space a metaphor for real space and thus only a translation of it into virtual space, or is it more than that? Perhaps a transformation or extension of it? And what is different between these two, if there are any differences?
The term "architectonics" (***Architektonik***) refers to the structure and nature of this space and thus to the threshold between architecture, either as system and structure or process.
As such, architecture is either a metaphor (as discussed by Kant) – e.g. software-architecture – or a design process, with inherent methods and a specific spatial knowledge, which can be applied to the construction of virtual space.
Architecture and town planning are disciplines based on ***design*** that create real and virtual spaces: rooms, buildings, towns, worlds. The process of design itself has always comprised a "virtual space" spanning the contingency of reality, with all its restrictions: the act of design itself – between making and thinking – and the implementation of the project in a real context, with a constant feedback loop between these different stages. The introduction of computers in the design process in the 1990s has significantly extended this space and created new and closer connections between reality and virtuality, which have only recently started to transform architecture and the act of design through algorithms and "design to production." This "virtual space" of design has two implications for our discussion: on the one hand, despite decades of investigations via ***design theory***, it remains a ***terra incognita***, which reflects the Janus-faced nature of architecture between art and science; on the other, architecture and urbanism have traditionally fetishized this virtual space of the project – as utopia – not least because of the many oppositions to its ideals by clients, politics, costs, and so forth.

This raises two questions that we would like to address in this round table/conference:
Starting from these concurrent virtual spaces – architecture/video games/simulations – what can architecture learn from new virtual realities, in terms of its nature and of the act of design, and what can be the specific contribution of architecture both to the design of virtual spaces and their understanding? What can thus the contribution of architects to this new order of the virtual be, in the field of video games – including the aspects of gaming and narration – , serious games, or in the field of simulations, which allow for measurement and prediction (e.g. ***smart cities***)? Can the architect apply their specific spatial abilities and the capacity to

construct narratives around projects in this virtual context? And inversely, what can architecture and urbanism learn from this new virtual reality in all of its implications? Is there something of the design of virtual spaces in games or simulations that can be implemented in architecture and urbanism, in order to improve its efficiency or its sustainability, as well as to better understand the processes and nature of design?

In the end, we must ask ourselves if the ubiquity of this virtual order represents a danger for architecture and urbanism, ushering in greater distance to the human "body" and "society," for whom architecture has traditionally been constructed. Will these disciplines reduce their social and cultural impact through building virtual utopias, in which human beings and social ties will be simulated or mimicked – and thus lost? And is this euphoria for the potential of digital technologies not leading us again to naïve optimism, which in turn distracts us from real problems and leads architecture and urbanism to further abstraction from "reality?"

We would like to address these questions in a lively discussion with experts from different fields, most of whom hold a degree in architecture. Besides eight invited speakers, there are two more positions open to individuals with different disciplinary backgrounds – game theory, philosophy, architecture, history of technology, etc. – interested in these questions and ideally with a background in architecture. These will be selected via an open call for papers.

Interested researchers should apply by sending a short abstract of max. 500 words in PDF format and a short CV to: architektonikdesvirtuellen@zhaw.ch at the latest by Sunday, 4 March 2018. Travel expenses will be compensated.

Organization: Andri Gerber, Institute Urban Landscape, ZHAW Winterthur, in collaboration with Werner Oechslin, Stiftung Bibliothek Werner Oechslin. The conference will be in English.

Contact: architektonikdesvirtuellen@zhaw.ch

Confirmed Speakers:

1. James Delaney (BlockWorks)
2. Ulrich Götz (ZHdK)
3. Stefano Gualeni (University of Malta)
4. Stephan Günzel (University of Applied Sciences Europe)
5. Christoph Hölscher (ETH)
6. Silke Steets (Universität Leipzig)
7. Nicole Stoecklmayr (Scenes of Architecture)
8. Ekim Tan (Play the City)

Moderation: Johannes Binotto (HSLU), Philippe Koch (ZHAW)